

**Amendments to the Claims:**

Please amend claims 7, 18, 20 and 26 as shown in the following listing of claims. This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (previously presented) Inductive-system comprising:
  - a first part in the form of a spiral printed coil comprising a number of turns defined by at least one track width and at least one turn spacing; and
  - a second part in the form of an air coil comprising a further number of turns defined by at least one wire diameter and at least one coil diameter,wherein the printed coil and the air coil are coupled serially, wherein a total inductance of the inductive-system is substantially equal to an inductance of the printed coil plus an inductance of the air coil plus a mutual inductance that is determined based on a turning direction of said printed coil, a direction of winding of said air coil and a length of said air coil, and wherein the mutual inductance increases with the length of the air coil until a maximum overlapping area between the printed coil and the air coil has been reached.
2. (canceled)
3. (canceled)
4. (canceled)
5. (previously presented) Inductive-system as defined in claim 1, wherein the number of turns are further defined by a diameter of a center path and the turning direction of said printed coil and the further number of turns is further defined by the direction of winding of said air coil.

6. (previously presented) Inductive-system as defined in claim 1, wherein one end of the non-printed coil is coupled to a center end of the printed coil, with the other end of the non-printed coil and an outer end of the printed coil constituting ends of the inductive-system .

7. (currently amended) Inductive-system as defined in claim 1, wherein ~~the printed coil is printed on an inner or an outer layer of a printed circuit board~~ an overlapping area between the printed coil and the air coil comprises a first triangle having a surface area equal to  $0.5 \cdot L \cdot R \cdot \sin(\varphi)$ , a circle segment having a surface area equal to  $0.5 \cdot R^2 \cdot \alpha$ , and a second triangle having a surface area equal to  $0.5 \cdot D \cdot R \cdot \sin(\theta)$ , wherein R represents a radius of the printed coil, D represents a coil diameter of the air coil, L represents a length of the air coil,  $\varphi$  represents an angle of the first triangle,  $\alpha$  represents an angle of the circle segment, and  $\theta$  represents an angle of the second triangle.

8. (previously presented).Inductive-system comprising:

a first part in the form of a printed coil comprising a number of turns defined by at least one track width and at least one turn spacing; and

a second part in the form of a non-printed coil,

wherein the printed coil and the non-printed coil are coupled serially, and wherein a mutual inductance of the printed coil and the non-printed coil increases with a length of the non-printed coil until a maximum overlapping area between the printed coil and the non-printed coil has been reached.

9. (previously presented) Tuner comprising a filter with an inductive-system, the inductive-system comprises:

a first part in the form of a spiral printed coil comprising a number of turns defined by at least one track width and at least one turn spacing; and

a second part in the form of an air coil,

wherein the printed coil and the air coil are coupled serially, wherein a total inductance of the inductive-system is substantially equal to an inductance of the printed

coil plus an inductance of the air coil plus a mutual inductance that is determined based on a turning direction of said printed coil, a direction of winding of said air coil and a length of said air coil, and wherein the mutual inductance increases with the length of the air coil until a maximum overlapping area between the printed coil and the air coil has been reached.

10. (previously presented) Method for producing an inductive-system comprising the steps of:

- producing a first part in the form of a spiral printed coil comprising a number of turns defined by at least one track width and at least one turn spacing;

- producing a second part in the form of an air coil; and

- coupling the printed coil and the air coil, said printed coil and said air coil being connected in series and having an inductance being a combination of an inductance of each of said printed coil and said air coil and a mutual inductance therebetween, wherein said mutual inductance is determined based on a turning direction of said printed coil, a direction of winding of said air coil and a length of said air coil,

- wherein the mutual inductance increases with the length of the air coil until a maximum overlapping area between the printed coil and the air coil has been reached.

11. (previously presented) Inductive-system as defined in claim 1, wherein the turning direction of the printed coil is clockwise and the direction of winding of the air coil is right turn.

12. (previously presented) Inductive-system as defined in claim 1, wherein the turning direction of the printed coil is clockwise and the direction of winding of the air coil is left turn.

13. (previously presented) Inductive-system as defined in claim 1, wherein the turning direction of the printed coil is counterclockwise and the direction of winding of the air coil is right turn.

14. (previously presented) Inductive-system as defined in claim 1, wherein the turning direction of the printed coil is counterclockwise and the direction of winding of the air coil is left turn.

15. (canceled)

16. (canceled)

17. (canceled)

18. (currently amended) The tuner of claim 9, wherein ~~the number of turns is further defined by a diameter of a center path and the turning direction of said printed coil~~an overlapping area between the printed coil and the air coil comprises a first triangle having a surface area equal to  $0.5 \cdot L \cdot R \cdot \sin(\varphi)$ , a circle segment having a surface area equal to  $0.5 \cdot R^2 \cdot \alpha$ , and a second triangle having a surface area equal to  $0.5 \cdot D \cdot R \cdot \sin(\theta)$ , wherein R represents a radius of the printed coil, D represents a coil diameter of the air coil, L represents a length of the air coil,  $\varphi$  represents an angle of the first triangle,  $\alpha$  represents an angle of the circle segment, and  $\theta$  represents an angle of the second triangle.

19. (canceled)

20. (currently amended) The method of claim 10, wherein ~~the number of turns is further defined by a diameter of a center path and the turning direction of said printed coil~~an overlapping area between the printed coil and the air coil comprises a first triangle having a surface area equal to  $0.5 \cdot L \cdot R \cdot \sin(\varphi)$ , a circle segment having a surface area equal to  $0.5 \cdot R^2 \cdot \alpha$ , and a second triangle having a surface area equal to  $0.5 \cdot D \cdot R \cdot \sin(\theta)$ , wherein R represents a radius of the printed coil, D represents a coil diameter of the air coil, L represents a length of the air coil,  $\varphi$  represents an angle of the first triangle,

$\alpha$  represents an angle of the circle segment, and  $\theta$  represents an angle of the second triangle.

21. (previously presented) The inductive-system of claim 8, wherein the non-printed coil comprises an air coil comprising a further number of turns defined by at least one wire diameter and at least one coil diameter.

22. (previously presented) The inductive-system of claim 21, wherein a total inductance of the inductive-system is substantially equal to an inductance of the printed coil plus an inductance of the air coil plus a mutual inductance of the printed coil and the air coil.

23. (previously presented) The inductive-system of claim 22, wherein a value of the mutual inductance has been chosen by combining a right turn air coil or a left turn air coil with a clockwise printed coil or an anti-clockwise printed coil and by selecting a length of the air coil.

24. (previously presented) The inductive-system of claim 21, wherein the number of turns are further defined by a diameter of a center path and a turning direction, with the further number of turns being further defined by a turning orientation.

25. (previously presented) The inductive-system of claim 8, wherein one end of the non-printed coil is coupled to a center end of the printed coil, with the other end of the non-printed coil and an outer end of the printed coil constituting ends of the inductive-system.

26. (currently amended) The inductive-system of claim 8, wherein the printed coil is printed on an inner or an outer layer of a printed circuit board an overlapping area between the printed coil and the non-printed coil comprises a first triangle having a surface area equal to  $0.5 \cdot L \cdot R \cdot \sin(\varphi)$ , a circle segment having a surface area equal to  $0.5 \cdot R^2 \cdot \alpha$ , and a second triangle having a surface area equal to  $0.5 \cdot D \cdot R \cdot \sin(\theta)$ , wherein R represents a radius of the printed coil, D represents a coil diameter of the non-

printed coil,  $L$  represents a length of the non-printed coil,  $\varphi$  represents an angle of the first triangle,  $\alpha$  represents an angle of the circle segment, and  $\theta$  represents an angle of the second triangle.